1.

PEIYVE, YO. V.

USSR / Cultivated Plants. Cereals.

: Ref Zhur - Biol., No 8, 1958, No 34644 Abs Jour

: Polyvo, Ya. V. Author

: Latvian Agricultural Academy : Utilization of Tracer Elements Inst Title

: Kukuruza, 1957, No 1, 26-31. Orig Pub

: According to experiments conducted by the Lat-Abstract

vian Agricultural Academy in 1955, the treatment of corn seeds with solutions HzBOz, CuSO4 and Za304, in concentrations from 0.01% to 0.5%, promoted the germination increase in seeds and considerably increased the crowth of corn. The most effective concentrations appeared to be the following: for H3NO3 - 0.05%; for Cu304 -0.5,; for ZnSO4, all concentrations from 0.01

Card 1/2

37

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240720010-4

PEYVE, Ya.V.

Problems of soil fertility and plant mutrition. Fochwowedenie no 3:67-78 hr | 5? (4LRA 1°:7)

1. Akademiva nauk Latviyskoy SSR. (Soil fertility) (Fertilizers and manures)

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240720010-4

J : USSR : Soil Science. Mineral Fertilizers. Catagory >3418 Phys. Jour. : :Peyve, Ya.V.; Rin'ke, R.S. :A.J. Iatvian BSR :The Affectiveness of Holybdenum, Mirc and Boron huthor Inchitat. Derived from "itroous Fertilizers and Industrial 1516 liste 1 mi . nm. : Izv. AK LetvOBR, 1047, No. 5, 53-62 The effect of industr of waste and vitreous fertil izers containing micronutrients was studied in Abstract field and vegetative tests. The wastes and vitre- ous fertilizers containing to increased the yields: of peas by 33-40% and of lettuce by 37-53% when applied to the acid peut sand soil. Mo promoted protein synthesis in the peas and increased their uptake of I'm. Mo had no effect on the out yield. Industrial waste and vitreous fertilizers which contained Zn increased the lettuce harvest by 22 to 31% on the peat cartonate soil of the Latvian SSR. 1/2 Card: J-36

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240720010-4

USSR/Cultivated Plants. General Problems.

Abs Jour: Ref Zhur-Biol., No 17, 1958, 77560.

Augor : Peyve, Ya. V.; Krauya, A. Ye.

: AS Latvian SSR IBC

: Effect of Trace Elements on the Energy of Sprouting Tille

and Germination of Seeds of Agricultural Crops.

Orit, Pub: Latv. PSR Zinatnu Akad.vestis, Izv. AN LatvSSR, 1957,

No 7, 47-53.

Abstract: A study of the influence of weak solutions of trace

elements on the germination and energy of growth of seeds of wheat, beans, oat, cabbage and tomatoes with treatment before sowing was conducted by the Institute of Biology of the AS Latvian SSR in 1956.

Seeds were sprayed twice, then germinated at a

temperature of 20-25°. Optimal concentration of boric

Card : 1/2

CIA-RDP86-00513R001240720010-4" APPROVED FOR RELEASE: 06/15/2000

I.

USSR/Plant Physiology - Respiration and Metabolism.

: Ref Zhur - Biol., No 21, 1958, 95644 Abs Jour

: Peyve, Ya.V., Krauya, A.Ye. Author

: AS Latvian SSR Inst

Effect of Boron, Copper, Zinc and Manganese of the Title

Dynamics of Acidifying-Reducing Enzymes.

: Latv. ISR Zinatnu Akad. vestis, Izv. AN LatvSSR, 1957, Orig Pub

No 9, 59-64

: Before planting, oat, wheat, pea, cabbage and tomate seeds Abstract

were treated with a mixture of solutions of microelements (10 1 per 100 kg of seeds). The seeds were Germinated on filter paper and then raised for 40 days in water cultures in a Knop nutrient medium; 5 times during vegetation the activity was determined in the plants of ascorbinoxydase (I), polyphenoloxydase (II) and peroxydase (III) according

Card 1/2

CIA-RDP86-00513R001240720010-4" APPROVED FOR RELEASE: 06/15/2000

25-10-3/41

AUTHOR:

Peyve, Ya.V., President of the Latvian Academy

TITLE:

On the Banks of the Daugava River (Na beregakh Daugavy) of Sciences

PERIODICAL:

Nauka i Zhizn', 1957, # 10, p 8 (USSR)

ABSTRACT:

The president of the Latvian Academy of Sciences described some of the achievements reached by the Academy during the 11 years of its existences. Many Latvian scientists co-operated in compiling a thorough atudy on "Trace-elements in agriculture and medical science" (Mikroelementy v sel'skom khozyaystve i meditsine). Plant tissue contains considerable quantities of pentosans, especially deciduous trees and agricultural waste, such as corn cobs, sunflower husks, flax boons etc. By a comparatively simple chemical process furfurol an oily, vellow liquid is produced from these plants. According to the method elaborated in the Latvian Forestry Institute, furfurol can be transformed into maleic anhydride which is a fundamental element for the production of artificial resin, varnish, etc. By catalytic separation of carbon oxides from furfurol, furan is produced wilich is a new, important raw material for the production of artificial fibers such as nylon. In medical sciences, medicine contain-

Card 1/3

25-10-3/41 APPROVED FOR RELEASE 18 06/15/2000 CIA-RDP86-00513R001240720010-4"

ing furfurol was successfully applied against dysentery, typhus and other infectious diseases. Furfurol containing medicines such as furacylin, furadonin, furacydin have been used for the care of public health and furasolidon proved to be effective in controlling epidemic diseases of poultry. A Russian medicine, called "Tsiklamin" containing furfurol proved to have a healing effect upon hypertension.

The Institute of Physics of the Latvian Academy of Sciences developed a new method for marking cold-rolled steel bands. At the beginning of the technological process the different steel brands are marked according to a specified code with a pre-determined dosis of radioactive substances that are applied to the steel by a special device. In all following technological operations measuring devices are installed which register the number of radioactive marks and decipher the brand of steel to be rolled. Moreover, the signal of the radioactive marking can control the speed of rolling during the passage of a welded seam. In the Riga TV center a contactless radioactive relay is applied for automatic switching from one film projector to another to secure the uninterrupted demonstration of films. The factories "VEF"

Card 2/3

PEYVE, VAV

26-11-14/16

AUTHOR:

Peyve, Ya.V., Corresponding Member of the USSR Academy of Sciences, President of the Academy of Sciences of the Lat-

vian SSR

TITLE:

Development of Science in Soviet Latvia (Razvitiye nauki V

Sovetskoy Latvii)

PERIODICAL:

Priroda, 1957, # 11, p 117-124 (USSR)

ABSTRACT:

The author describes the development science has undergone in Latvia since the introduction of the Communist regime in 1945. Scientific research was systematically begun in 1946 when the Latvian Academy of Sciences was inaugurated. The Academy comprised 16 different institutes and laboratories. Specialists were recruited mainly from former bourgeois circles. In the eleven years of its existence, the Latvian Academy has steadily expanded and achieved remarkable results in the field of natural, agricultural and technical sciences. Since 1955, the Academy coordinates all research work on microelements which is being conducted in the entire Soviet Union. For developing a new method of synthesis and industrial production of the antitubercular drug "NACK", Academician A.I.Kalninsh and Corresponding Member of the

Card 1/2

20-117-5-51/54

AUTHORS:

Peyve, Ya. V., Corresponding Member AN USSR, and drauga, A. Ye.

TIPLE:

The Dynamics of Redox Enzymes in Plants, as Influenced by Prace Elements (Vliyaniye mikroelementov na dinaniku ekislitel'no-vosstan-

ovitel'nykh fermentov v rasteniyakh)

PERIODICAL:

Doklady AN SSSR, 1957, Vol. 117, Er), pp.900 - 90, (USSR)

ABSTRACT:

Many researchers have proved the important rôle of the trace elements in the fermentative processes of animal and plant cells (reference 1 - 10). The authors carried out the task explaining the influence of boron, copper, zinc, and manganese on the dynamics in the agricultural fodder plants mentioned in the title. Seeds of cats, wheat, cabbage, and tomators were cauterized with the solutions given in table 1. The concentrations given there were detected in preliminary experiments concerning the influence of these elements on the germinating power. In the course of the vegetation in single stages of development of the plants (up to be times) the following enzymes were determined: ascorbinoxidase, polyphenoloxidase, and peroxidase (according to reference 11). The results are given in table 1 and 2. The influence of the single trace elements is the following: boron (figure 1 A) increases the activity of the ascorbinoxidase during the germination of oats and reduces this

Card 1/3

20-117-5- 51/54

The Dynamics of Redox Enzymes in Plants, as Influenced by Trace Elements

activity in the phase of the first up to the second leaf. In the phase of the stalk- and ear formation the activity rises again. In wheat an increased activity of the ascorbinoxidase is observed only in the phase of the 2 first real leaves. The borch influence on the activity of the enzymes depends on the kind of plants and on the development phase. Boron increases to a certain extent the activity of the enzyme in question in tomatoes. In cabbage the mentioned activity is to a great extent increased during the germination, then it decreases, compared to the control. Furthermore beron increases the activity of the polyphenoloxidase in caubare and grain. No special rules were found in boron with respect to the peroxidase. Copper (figure 1 B) supports the activity of the ascorbinoxidase and rol, phenoloxidase in the first stales of levelopment of all agricultural plants, if the seeds are carterized with copper salts. This confirms the above indicated rôle important of the copper. Moreover the activity of peroxidase and increased in the first stages of development of oats, wheat, and cabbage by means of copper. The influence of zinc (figure 2 A) on the polyphenoloxidase was similar to that of copper, newever, did not show any rules with respect to the two other enzymes. Only in the germination stage of wheat and oats the activity of the ascorbinoxidase was supported. Zinc increased to some extent the activi-

Card 2/3

The Dynamics of Redox Enzymes in Plants, as Influenced by Proce Plenents

ty of percuidase in most stages in wheat and call $\alpha_0 \gamma_1$, whereas the contrary was the case in oats and tomatces. Manganese (figure 2 B) increased considerably the activity of all three enzymes simultaneously in oats, however, had scarcel, an influence on the same enzymes of the other experimental plants. In cabbage the activity of the polyphenoloxidase was increased to some extent by manganese, whereas that of the peroxidase was reduced. There are ? figures, 1 table, and 11 references, 5 or which are Slavic.

ASSOCIATION:

Institute for Biology of the ASof the Latvian SSR (Institut biologii Akademii nauk LatvSSR)

SUBMITTED:

July 29, 1947

Card 3/3

PEYVE, Ya, V., akademik, otv. red.; VLASYUK, F.A., akademik, red.; SIROCHENKO, I.A., prof., red.; VCYNAM, A.I., prof., red.; MINORIK, A.V., kand. biol. nauk, red.; OSIMCVSKAYA, L.K., doktor biol. nauk, red.; ZADEMIY, I.I., doktor sel'khoz. nauk, red.; KUMINNAYA, M.F., dots., red.; KLIMOVITSKAYA, Z.M., kand. biol. nauk, red.; MITSYK, V.Ye., kand. vet. nauk, red.; KAFITANCHUK, V.A., red.; RAD'KO, F.K., red.

[Trace elements in agriculture and medicine; materials] Eikroelementy v sel'skom khoziaistve i meditsine; materialy. Kiev, Gossel'khozizdat USSA, 1963. 689 p. (MIRA 18:1)

1. Vsesoyuznoye soveshchaniye po voprosam primeneniya mikroelementov v sel'skom khozyaystve i meditsine, 4th, Kiev, 1962. 2. Ukrainskiy nauchno-issledovatel'skiy institut fiziologii rasteniy Al! Ukr.SSR (for Ostrovskaya, Vlasyuk). 3. Institut biologii Ali Latviyskoy SSR (for Peyve). 4. Kiyevskiy meditsinskiy institut (for Kurinnaya). 5. Donetskiy meditsinskiy institut im. A.M.Gor'kova (for Voynar). 6. Ukrainskiy nauchnoissledovatel'skiy institut fiziologii i biokhimii sel'skokhozyaystvennykh zhivotnykh (for Mitsyk). 7. Belotserkovskiy sel'skokhozyaystvennyy institut (for Zaderiy).

ALIYEV, G.A., akademik, otv.red.; ABUTALYBOV, M.G., prof., red.; BERZIN, Ya.M., akademik, red.; GADZHIYEV, F.M., kand.vet.nauk, red.; GYUL'AKHMEDOV, A.N., kand.sel'akokhoz.nauk, red.; IVANOVA, N.I., kand.sel'akokhoz.nauk, red.; KARAYEV, A.I., akademik, red.; GUSEYNOV, D.M., red.; GUSEYNOV, B.Z., prof., red.; PEYVE, Ya.V., red.

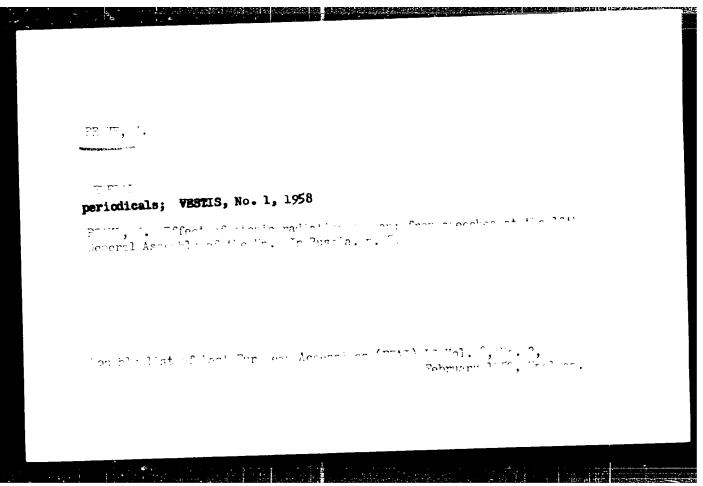
[Abstracts of reports of the Third All-Union Conference on microelements, April 1958] Tezisy dokladov Vsesoyuznogo soveshchaniya po mikroelementam, Aprel 1958. Baku, Izd-vo Akad.nauk Azerbaidzhanskoi SSR, 1958. 398 p. (MIRA 12:3)

1. Vsesoyuznoye soveshchaniye po mikroelementam. 3d, 1958.

2. Akademiya nauk Azerb.SSR (for Aliyev, Karayev). 3. Akademiya nauk Latviyskoy SSR (for Berzin). 4. Chlen-korrespondent Akademii nauk Azerb.SSR (for D.M.Guseynov). 5. Chlen-korrespondent Akademii nauk SSSR (for Peyve). 6. Institut pechvovedeniya i agrekhimii AN Azerb.SSR (for D.M.Guseynov, Aliyev, Gyul'akhmedov). 7. Institut biologii AN Latv.SSR (for Peyve). 8. Stalinskiy meditsinskiy institut (for Ivanova). 9. Institut botaniki AN Azerb.SSR (for B.Z.Guseynov). 10. Azerbaydzhanskiy institut zemledeliya (for Abutalybov).

(Trace elements)

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240720010-4



PEIVE J.

GENERAL

PERIODICALS: VESTIS, NO. 6, 1958

PEIVE, J. Content of themicroelement forms in USSR soils accessible to plants. In Russian. p. 37.

Monthly list of East Eurupean Accessions (EEAI) LC, VOL. 8, No. 2, February 1959, Unclass.

PEIVE, J.; RINKIS, G.

GENERAL

PERIODICALS: VESTIS, NO. 6, 1958

PEIVE, J.; RINKIS, C.Field laboratory for determination of soil microelements (Cu, Zn, Mn, E Co, Mo, and B) accessible to plants. In Russian. p. 51.

Monthly list of East Surupean Accessions (EEAI) LC, VOL. 8, No. 2, February 1959, Unclass.

PEYVE, Ya.V., red.; PETERBURGSKIY, A.V., prof., red.; GRIGOR'YEVA, A.I., red.; BALLOD, A.I., tekhn.red.

[Chemistry in agriculture] Khimiis v sel'skom khozisistve.
Noskva, Gos.izd-vo sel'khoz.lit-ry, 1959. 247 p. (MIRA 12:6)

1. Chlen-korrespondent AN SSSR (for Peyve).
(Agricultural chemistry)

PEYVE, Ya.V., glav. red.; ALIYEV, G.A., akademik, red.; ABUTALYBOV, M.G., prof., red.; BERZIN, YA.M. [Berzins,J.], akademik, red.; VINOGRADOV, A.P., akademik, red.; VIASYUK, P.A., akademik, red.; VOYNAR, A.O., prof., red.; DROBKOV, A.A., prof., red.; KATALYMOV, M.V., prof., red.; KOVAL'SKIY, V.V., red.; KOVDA, V.A., red.; KEDROV—ZIKHMAN,O.K., akademik, red.; LEONOV, V.A., akademik, red.; PETERBURGSKIY, A.V., prof., red.; SINYAGIN, I.I., red.; CHERNOV, V.A., prof., red.; CHANISHVILI, Sh.F., red.; SHKOL'NIK, M.Ya., prof., red.; SHCHERBAKOV, A.P., kand. sel'khoz. nauk, red.; VENGRANOVICH, A., red.; DYMARSKAYA, O., red.; KLYAVINYA, A [Klavina, A.], tekhn. red.

[Use of trace elements in agriculture and medicine; transactions] Primenenie mikroelementov v sel'skom khozitistve i meditsine; trudy. Riga, Izd-vo Akad.nauk Latviiskoi SSR, 1959. 706 p. (MIRA 14:12)

1. Vsesoyuznoye soveshchaniye po mikroelementam. 3d, Baku, 1958.

2. Chlen-korrespondent Akademii nauk SSSR (for Peyve, Kovda). 3. AN Azerbaydzhanskoy SSR (for Aliyev). 4. AN Latviyskoy SSR (for Berzin).

5. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk im. V.I.Lenina (for Vlasyuk, Kedrov-Zikhman). 6. AN Belorusskoy SSR (for Leonov).

7. Chlen-korrespondent Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk im. V.I.Lenina (for Sinyagin, Koval'skiy). 8. Chlen-korrespondent AN Gruzinskoy SSR (for Chanishvili).

(Trace elements) (Biochemistry) (Agriculture)

PEYVE, Ya. (Riga)

Science working for the national economy. MTO no.4:15-16 Ap 159. (MIRA 12:6)

1. Chlen-korrespondent AN SSSR, prezident AN Latviyskoy SSR, (Research, Industrial)

PEYVE, Ya.V., akademik

Application of trace elements in agriculture. Zemledelie 7 no.3:23-29 Mr '59. (MIRA 12:4)

1. Prezident AN Latviyskoy SSR. (Trace elements)

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240720010-4

Prive, Ya.V.; Rin'KIS, G.Ya.

Rapid methods applied in analysing soils for microelements (Cu, Zn, Mn, Co, Mo and B) available to plants. Pochvovedenie no.9:65-72
S '59.

(Soils--Analysis) (Trace elements)

S07/26-59-3-3/47

Peive, J. 7. (Riga), President; Corresponding Member of the AS, "Sop. AUTHOR:

The Development of Natural Sciences in Latvi. TITLE:

Priroda, 1959, ARr 3, pp 9-14 (USSR) PERIODICAL:

In this article the author describes the past achieve-ABSTRACT:

ments and future tasks in the technical, chemical and physical field of the Latvian SSR. The Institut fiziki Akademii nauk Latviyskoy SSR (Institute of Physics of the Latvian Academy of Sciences) is engaged in research on utilizing atomic energy for peaceful purposes, especially studying the use of radioactive isotopes in industry. Together with enterprises of the Latvian Sovnarkhoz, this Institute developed a number of radioactive devices for automatic control of technological processes, the test samples of which had been produced by the VEF

plants, the Radio Plant imeni A.S. Popov, "Gidro-Card 1/7

...(7)-39-34-7

The Development of Mataria, Darensen in Latvice

metpribor", "Kompressor" and the Tallinskiy zavod kon rol no-izmeritel nykh priborov (Falim Flant of Control and Measuring Devices). Dozens of radioactive devices operate in the VEF Hant and the parfyumerno-kosmeticheskiy zavod "Dzintars" (Perfume and Cosmetics Plant "Dzintars"). During the next Seven Year Plan, research will be carried out by the Institute of Physics on magnetic hydrodynamics, e ecoromagnetic induction pumps, electronic calculating machines, etc. The main future task consists in developing new physical principles for measuring and central devices, and for production automation. The Astrofizicheskaya laboratoriya Akademii nauk Latviyskoy JOR (Astrophysical Later tory of the Latvian AJ) will study the structure and development of the stellar system and the metagalaxy, and receive a new observatory in the Baldone Rayon. During the past few years, the Institut energetiki i elektroteknniki (Institute of Power Engineering

Card 2/7

2011-10-10-3-3/-7

The Development of Natural Sciences in Latvia.

and Electrotechnics) concentrated on problems concerning district heating and power generation in Riga and agricultural regions. The automation of the local systems of heat supply developed by this Institute is of special interest. A special laboratory for semi-conductors will be established for studyin question of using semi-conducting rectifiers for local electric trains. Together with several institutes of physics of other Union Republics, the Institute is studying possibilities for establishing a unified power system of the Northwest. The Institut mashinove eniya (Institute of Mechanical Engineering) has carried out valuable investigations on the structural strength of machines and worked out a theory and arrangements for cold welding of metals for introduction in the industry. Control instruments for metal plating processes were developed. Over 100 enterprises in the USSR use the first samples of these devices for the control of metal plating

Card 3/7

Card 4/7 automation of production processes and the stability and resistance of machines. The Institut

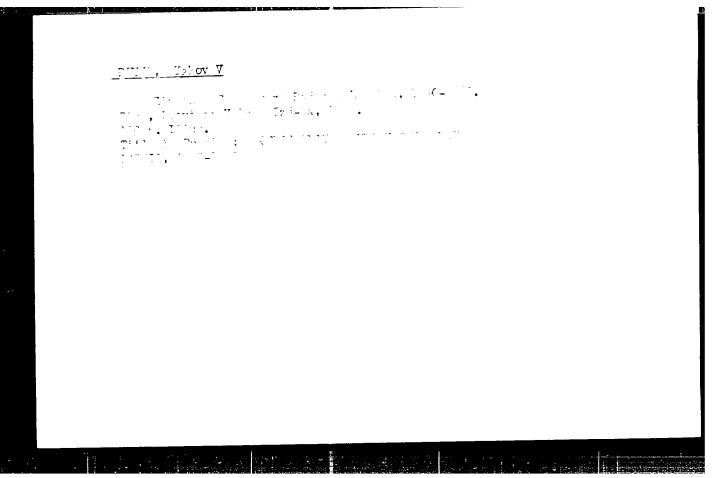
0 1/ -- / -: -:/-7

The Development of Datames does need an interest.

key DD. (Indicate of Jenstriction and Architecture of the Latvian AD) is equated in rerearch on new building materiary make from local raw material. At the moment, the Latvian AD moderate because of Jenstrites in Indicate kindle (Indicate of Jenstrites) and Indicate kindle (Indicate of Jenstrites) and Indicate of Architecture of Indicate of Jenstrite of

Card 5/7

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240720010-4



PEYVE, Yan Voldemarovich [Peive, J.V.]; DYMARSKAYA, O., red.; PILADZE, Ye., tekhn. red.

[Microelements and ferments] Mikroelementy i fermenty. Riga, Izd-vo Akad. nauk Latviiskoi SSR, 1960. 133 p. (MIRA 14:10)

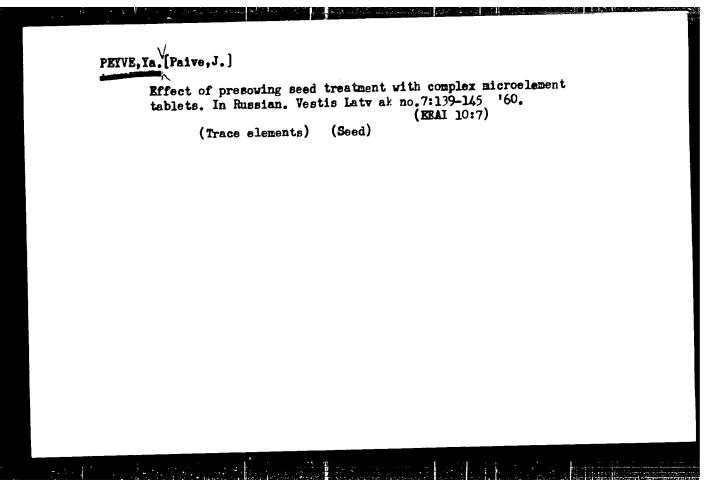
(Soil chemistry) (Fermentation)

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240720010-4

PEYVE, Ya.V.

"Minor Elements Content (B, Cu, Mn, In. Mc, C.) in the didicate the USCA and the Effectivity of Pertilizers Containing Minor Elements.

(Corresponding Member, Academy of Sciences USCA) report to be presented at the Ctl Inti Sci. Science Congress. Madison, Wisc rain, 15-23 August 1060



PEYYE, Ya.Y.

Boron and molybdenum in Latvian soils. Pochvovedenie no.9:35-43 8 (MIRA 13:9)

1. Akademiya nauk Latviyekoy SSR.

(Latvia--Soils--Boron content) (Latvia--Soils--Molybenum content)

PEYVE, Ya.V. [Peive, J.]

Trace elements (cobalt, copper, zinc, molybdenum) in soils of the Latvian S.S.R. Trudy Biogeokhim. lab. no.11:43-59 '60.

(MIRA 14:5)

1. Institut biologii AN Latviyskoy SSR.

(LATVIA_MINERALS IN SOIL) (TRACE EIEMENTS)

PETVE, Ya.V.

Trace elements in agriculture and public health. Vest.All
SSSR 30 no.:17-23 My '60. (MIRA 13:5)

1. Chlen-korv sepondent AN SSSR.
(Trace elements)

PEYVE, Yan Vol'demarovich, akademik; ANTONOVA, M.M., red.; TRUKHINA, O.N., tekhn. red.

[Trace elements and their importance for agriculture] Mikroelementy i ikh znachenie v sel'skom khoziaistve. Moskva, Izd-vo sel'khoz. lit-ry, zhurmalov i plakatov, 1961. 60 p. (MIRA 14:12) (Agriculture) (Trace elements)

PETVE, Yan Vol'demarovich; KOREYSHO, Ye.G., red.; PEVZNER, I.V., tekhn.

[Biochemistry of soils] Biokhimiia pochv. Moskva, Gos. izd-vo sel'khoz. lit-ry, zhurnalov i plaketov, 1961. 421 p.

(MIRA 14:9)

1. Chlen-korrespondent AN SSSR (for Peyve).
(Soil chemistry)

PEYAVE Ya. V., ZHIZNEVSKAYA G. Ya. (USSR)

"Change in the Nitrate Reductase Activity in Flants Caused by Molybdenum and Copper."

Report presented at the 5th Int'l Biochemistry Congress, Moscow, 10-16 Aug. 1961

PEYEVE, Ya.V., ZHIZNEVSKAYA Ya., KRAU-BERIIN Ya. (USSR)

"Effect of Copper on the Content of Carotenoids and Chlorophyll in Plant Leaves."

Report presented at the 5th Int'l Biochemistry Congress, Moscow, 10-16 Aug. 1961

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240720010-4

-PYVE, Ya. V., ZHIZNEVSEAYA, 7. Ya., (USSR).

Change in the Nitrate Reductase Activity in Plants Caused by Molybdenum and Copper.

report presented at the 5th Int'l. Biochemistry Congress, Moscow, 10-16 Aug. 1961

PEYVE, Ya. V.

Role of trace elements in the metabolism and productivity increase of farm crops. Izv. AN SSSR. Ser. biol. no.6:848-856 N-D 161. (MIRA 14:11)

Transfer and a second contract of the second

1. Biological Institute, Academy of Sciences of the Latviar S.S.R., Riga.
(TRUCE ELEMENTS) (FIELD CROPS)

PEYVE, Ya.V.; ZHIZNEVSKAYA, G.Ya.; KRAUYA, A.Ye.

Effect of copper on the carotinoid content of plants Fiziol.
rast. 8 no.4:449-453 161. (MIRA 14:11)

1. Institut of Biology, Latvian S.S.R. Academy of Sciences, Riga.

(Plants, Effect of copper on) (Carotinoids)

PEYVE, Ya.V.

Role of trace elements in increasing the productivity of farm crops. Zemledelie 23 no.4:73-80 Ap '61. (MIRA 14:3)

- throws of

1. Chlen-korrespondent AN SSSR.
(Field crops-Fertilizers and manures)
(Trace elements)

PEYVE, Ya. [Peive, J.]; RIN'KIS, G. [Rinkis, G.]

Effect of calcium, iron, and aluminum on the uptake of micro-elements by plants. Vestis Latv ak SSR no.8:81-85 '62.

1. Institut biologii AN Latviyskoy SSR.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240720010-4"

· 通过设计模式量 2000年200日 中国 1450年 (本) 1000年 (1000年)

PEYVE, Ya. Y.

Trace element fertilizers in agriculture. Zhur. VZHO 7 no.5: 542-546 62.

1. Chlen-korrespondent Akademii nauk SSSR.

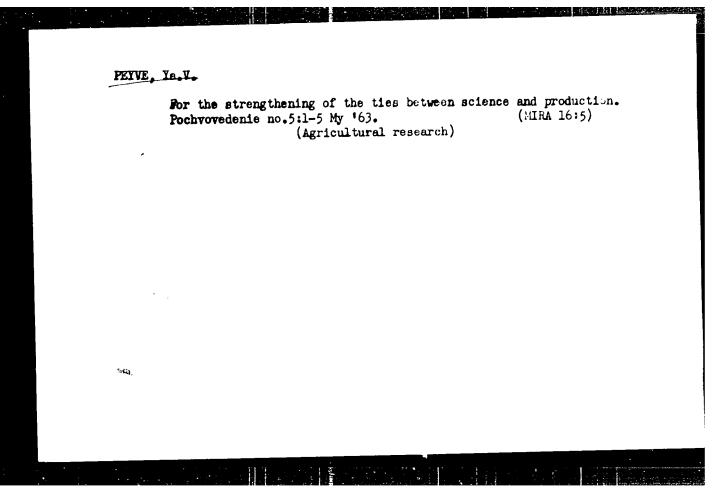
(Fertilizers and manures) (Trace elements)

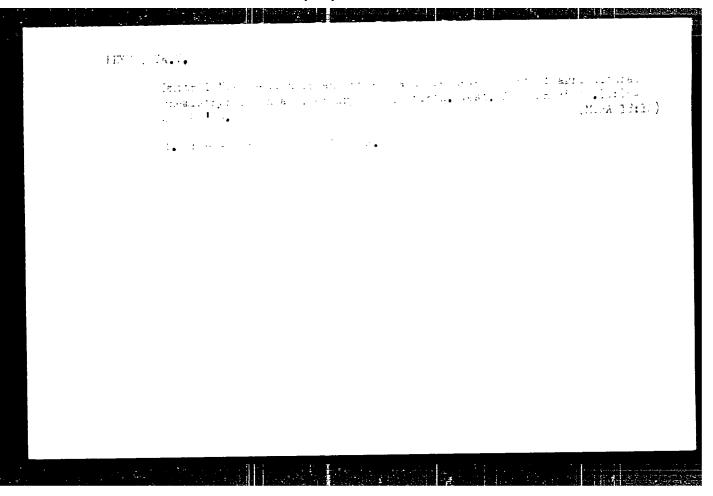
PEYVE, Ya. [Peive, J.], akademik

Trace elements in agriculture. Nauka 1 zhyttia 12 no.7:10-11 (MIRA 16:1) J1 '62.

1. AN Latvlyskoy SSR.

(Trace elements)





Exception of the control of the cont

PEYVE, Ya.V. [Peive, J.]

Trace element content of soils in the savanna zone of the Republic of Mali. Pochvovedenie no.11:47-50 N '63. (MIRA 16:12)

1. Institut biologii AN Latviyskoy SSR.

PEYVE, Ya.V.; PETERBURGSKIY, A.V., doktor sel'khoz. nauk, prof.; GAR, K.A., kand. sel'khoz. nauk; GOLYSHIN, N.M., kand. biol.

nauk; KOHOTKIKH, G.I., kand. sel'khoz. nauk; CHESALIN, G.A., kand. sel'khoz.nauk; RAHITIN, Yu.V., doktor biol. nauk; ZEZYULINSKIY, V.M., kand. sel'khoz.nauk; DEVYATKIN, A.I., kand. sel'khoz. nauk; VENEDIKTOV, A.M., kand.sel'khoz. nauk; kand. sel'khoz. nauk; BORISOVA, L.G.; BEREZNIKOV, TARANOV, M.G., kand. biol. nauk; BORISOVA, L.G.; BEREZNIKOV, V.V., kand. tekhn.nauk; KONDRATENKO, k.V., st. nauchn.sotr.; BORISOV, F.B., st. nauchn.sotr.

[Chemistry in agriculture] Khimiia v sel'skom khoziaistve. (MIRA 17:9)

1. Chlen-korrespondent AN SSSR (for Peyve). 2. Nachal'nik laboratorii Nauchno-issledovatel'skogo instituta plastmass (for Borisova). 3. hauchno-issledovatel'skiy institut plastmass (for Kondratenko, Borisov).

PEYVE, Ya.V.

Soil science in the service of the intensification of agricultural production. Pochvovedenie no.3:147 Mr *co.* (MinA 17:1)

PEYVE, Ya.V.

Chemistry as a powerful means for an increase in soil fertility and the development of agricultural production. Pochvovedenie no.1:3-6 Ja '64. (MIRA 17:3)

ones par Propins de Ligita de la contrata <u>Marcollo de la conse</u>

PEYVE, Ya.V. [Peive, J.]; ANSPOK, P.I. [Anspoks, P.]; PAKALN, G.Zh. [Pakalns, G.]; KONONENKO-Stepovaya, T.A.; STEPOVOY, A.I.

Mapping trace element contents of soils on a collective farm and estimating the effectiveness of the use of fertilizers. Pochvovedenie no.7:1-9 J1 64. (MIRA 17:8)

1. Institut biologii AN Latviyskoy SE.

PEYVE, Ya.V. [Peive, J.]

Microfertilizers in agriculture. Priroda 53 no.4:31-41 '64.

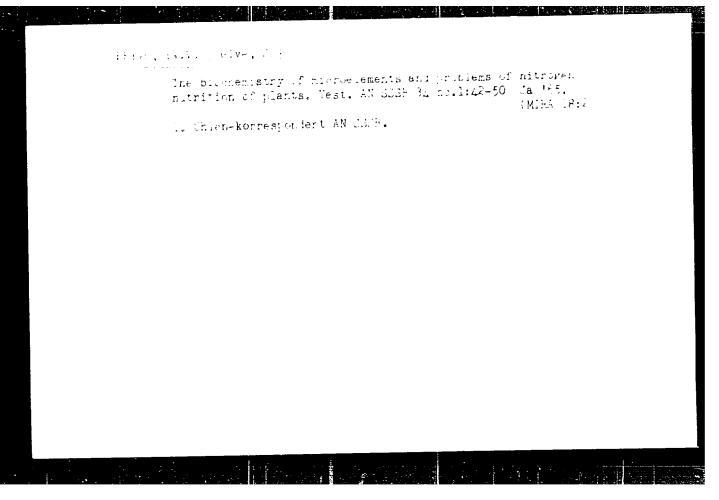
(MIRA 17:4)

1. Chlen-korrespondent AN SSSR.

PEYVE, Ya.V. [Peive, J.]

V.I. Vernadskii and the study on the content of trace elements in soils. Pochvovedenie no.8:21-39 Ag '63. (MIRA 16:9)

1. Akademiya nauk Latviyskoy SSR.



YUGOSLAVIA / Farm Animals. Cattle.

Abs Jour: Ref Zhur-Biol., No 9, 1958, 40435.

Author : Peyvich Obren 14., Dzhordzhevich Jovan. Stef-

anovich Radosav.

Inst : Not given.

Title : The Changes of the Quality of Fat, Casein and

Proteins in the Milk of Domestic Simmenthal Cows During a Period of Three Complete Lacta-

tions.

Orig Pub: Zb. radova Pol'oprivrednog fak. Un-t Beo-

gradu, 1956, 4, No 1, 126-142.

Abstract: On the basis of three years of experimentation

(1951-1953), it was established that the fat content in the milk of the Simmenthal cows ranged from 3.43% to 4.90% (the average amount was about 3.9%). The fat content in the milk

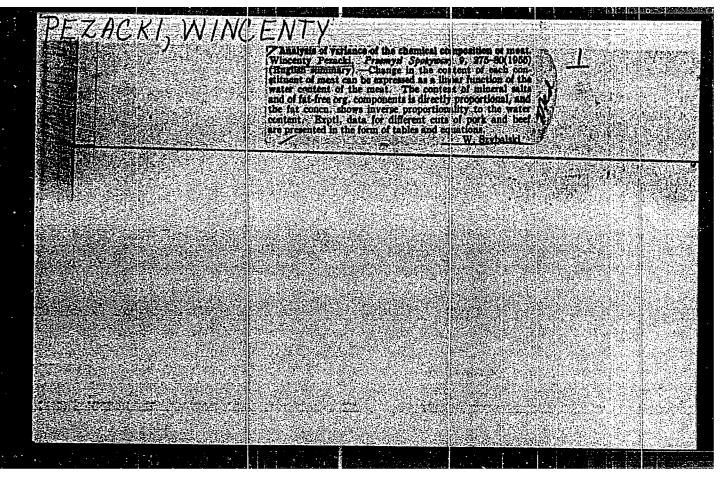
Card 1/2

24

PEZA, B.

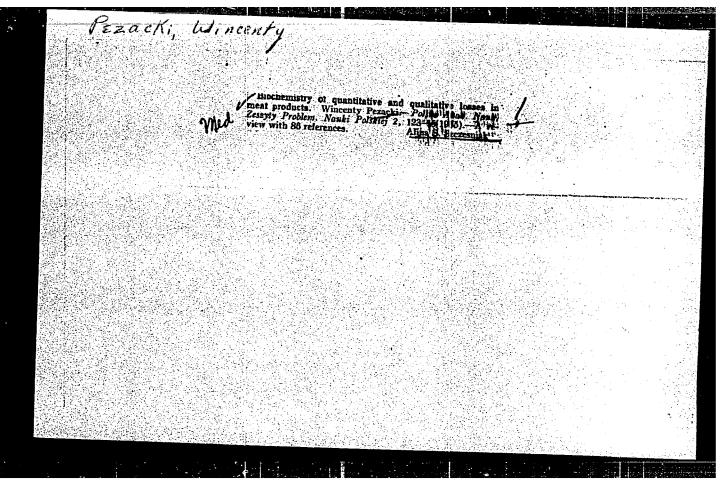
Rational use of electric-power stations, p. 8, TEKNIKA, (Ministria Industri-Miniera dhe Ndertim-Komunikacion) Tirane, Vol. 3, No. 1, Jan./Feb. 1956

SOURCE: East Puropean Accessions List, (FEAL) Library of Congress, Vol. 5, No. 12, December 1956



PEZACK	Refert of alternating meat stating. W. Pares. 50 april 10, 317-21(16 of bring curing of meat amp. a.e. is applied (Calincreased and reduction faster; The process is not a state of the process in the pr	alactric current on the partie and J. Knezyński. 56) (English summary), is altortened by 30% if a petrodes). The content of it of nitrates to nitrites it contents and the content of the	Process of the state of the sta		
^С ЖРРК ӨVED	FOR RELEASE: 06	/15/2000 CI	A-RDP86-0051	3R0012407200	10-4"

State Euro - an Accessions List of ALD. L. Ja. 11 day. Leg. day.



PEYZAKHZON, E. E., ed.
work practice by engineers of mayor freing trains. Mosava, Jos. transc. wheledor. indexo
.F58W
1. Railroads - Russiaocomptives - rerformance reizarnson. r.m., ed.

PEYZINA. Z. L.

36993. Papulesnyy Psevdolyuyes Genitaliy (Pseudolues Papulosa Genitalis), Uchen. Zapiski (L'vovsk. Nauch.-issled Kozhno-venerol. In-t), t. II, 1949, c. 21-24.

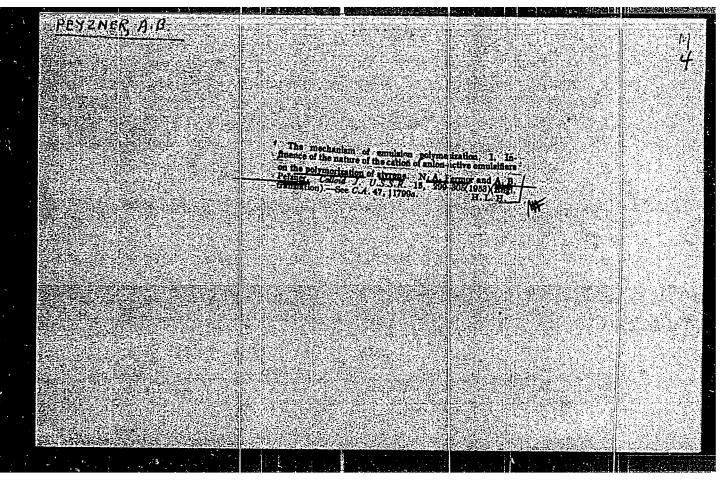
SO: Letopis' Zhurnal'nykh Statey, Vol 50, Moskva, 1949

FERMOR, N.A.; PEYZNER, A.B.

Mechanism of emulsion polymerization. Part 1. Effect of the nature of the cation of anion-active emulsifiers, on polymerization of styrene. Koll. zhur. 15 no.4:292-298 '53. (MLRA 6:8)

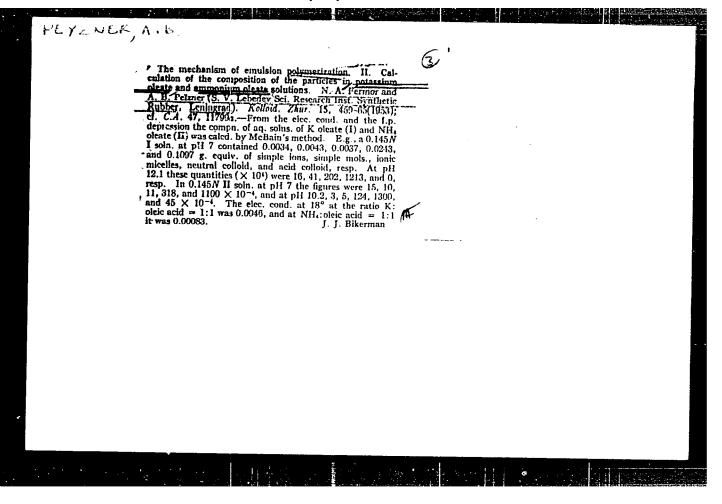
1. Nauchno-issledovatel'skiy institut sinteticheskogo kauchuka imeni S.V. Lebedeva (Leningrad). (Polymers and polymerization) (Styrene)

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240720010-4

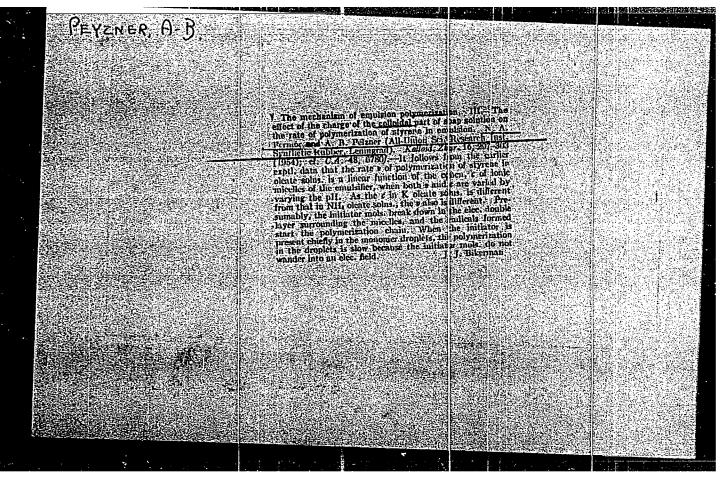


"APPROVED FOR RELEASE: 06/15/2000 CIA-

CIA-RDP86-00513R001240720010-4



"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240720010-4



AUTHORS:

SUV/138 -5--4-2/13

Peyzner, A. B; Fermor, N. A; Lebedev, A. V.

TITLE:

On the Influence of Plasticity of Rubber on the Technological Properties of Synthetic Latexes. (O vliyanii plastichnosti kauchuka na tekhnologicheskiye svoystva

sinteticheskikh lateksov)

PERIODICAL:

Kauchuk i Rezina, 1958, $N_{r.4}$. pp. 4 - 5. (USSR).

ABSTRACT:

S. V. Lebedev (Ref.1) showed that the plasticity is an important property of sodium 1,3-butadiene rubber, and, therefore, the plasticity was taken as a basis for classifying different types of this rubber (Ref.2). The plasticity indicates the basic molecular characteristics of the rubber (average molecular weight, fractional composition, branching etc.). It is, therefore, necessary to regulate the plasticity of emulsion rubbers during their synthesis. There are some publications on the synthesis of latexes containing rubbers of various plasticity (Ref.3), but no systematic investigations have been carried out on their use for the manufacture of various goods. The plasticity of the rubbers was proved to be one of the essential factors during investigations carried out by the All-Union Research Institute for Synthetic Rubber (VNIISK) Wreroyuznyy

Card 1/3

On the Influence of Plasticity of Rubber on the Technological

nauchno-issledovatel skiy institut sintetiches for kauchuka (VNIRK) on the conditions for the manufacture of industrial latexes. VNIISK, MIR (Research Institute of Institut rezinovykh i lateksnykh izdeliy) and the Leningrad Factory RTI elaborated methods and conditions for the preparation of special latexes SKS-50 PG (temperature of polymerisation = 500C) and SKS-50 PKH acids as emulsifiers, and also latex mixtures for manufacturing foam rubber (car seats) etc. It was found that the properties of the latex plays an important part during the manufacture of the foam itself. Methods and conditions for manufacturing the special latex SKS-50 were investified by the Leningrad Branch of the Research Institute factory "Sevkabel" promyshlennosti (NIIKP)) and the cables with a thin layer of insulation. The authors contained in the latex on the quality of the rubber roods,

Card 2/3

3 V/138 - M-4-2/12

On the Influence of Plasticity of Rubber on the Technological Properties of Synthetic Latexes.

and modified the methods of production by taking their hypothesis into account. Investigations are carried out at present, in conjunction with the NII Tyre Industry, on the influence of the plasticity of the polymer on its adhesive properties. The plasticity of a polymer also influences the process of manufacture of rubber goods by ion - precipitation. In particular, in chloroprene latex the molecular characteristics of a polymer influence considerably the rate of ageing of these latexes and the quality of the rubber articles. The influence of the plasticity of the rubber contained in the latex on the use and properties of manufactured goods requires further investigation. Laboratories should evolve more stanlards and more universal methods of defining the plasticity of the polymer in the latex. There are 5 References: 1 English and 4 Soviet.

ASSOCIATION: All-Union

All-Union Research Institute for Synthetic Rubber im. Academician S. V. Lebedev. (Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka im. akad. S. V. Lebedeva).

Card 3/3

1. Synthetic rubber--Properties 2. Rubber--Plasticity

0.0000

77284

SOV/63-4-6-18/37

AUTHOR:

Peyzner, A. B.

TITLE:

All-Union Conference on Synthetic Latices

PERIODICAL:

Khimicheskaya nauka i promyshlennost', 1959, Vol 4, Nr 6,

pp 793-795 (USSR)

ABSTRACT:

The conference was organized by Leningrad Section of the D. I. Mendeleyev All-Union Chemical Society and All-Union Scientific Research Institute of Synthetic Rubber, and was held in Leningrad in April 1959. More than 250 representatives from research institutes, laboratories and the chemical industry were present. Altogether, 38

reports were presented. A. V. Lebedev (All-Union Scientific Research Institute of Synthetic Rubber) reported on the general state and prospects of the Soviet synthetic latices industry. The production of latices will be increased 10-fold during the current seven years. Among them the following new special latices will be produced: SKS-30ShKhP, SKD-1, DMVP-10 (for impregnation of tire cord); SKS-60PG (for production

Card 1/5

All-Union Conference on Synthetic Latices

77284 **SOV**/63-4-6-15 37

of sponge items); SKS-65PG (starting material for production of paints); SKS-30-1 (for production of time-walled items); SKS-30GPS and SKS-60GPS (for production of artificial leather); SKS-50I (for insulation of electric wires); glue latex SKS-50GP, etc. The other reports presented were: V. V. Chernaya (NIIRP - Scientific Research Institute of the Rubber Industry), the use of synthetic latices in rubber industry; R v. Uzina (Scientific Research Institute of Tire Industry), selection of special latices for impregnation of tire cord; N. I. Znamenskiy, O. A. Selivanov, L. S. Fomina, V. V. Chernaya, V. L. Babitskiy, and V. L. Sushelinskiy, dispersion of inguedients of latex mixtures; B. A. Dogadkin and L. G. Senatorskaya, strengthening of the rubber in latex and possible application of this method for direct production of rubber items from latex. The following reports were devoted to the industrial production of new special latices: B. Ye. Kutsenok, B. A. Dolgoplosk, Ye. I. Tinyakova, production of carboxylcontaining latices; A. B. Peyzner, A. V. Lebedev,

Card 2/5

All-Union Conference on Synthetic Laticen

Targrand, Ye. P. Svirsvari, A. A. Kurrich, S. V. Targrand, et al., production of SKS-DPJ value for sponge rubber; N. A. Fermor, A. B. Pevaner, A. V. Leteler, Ye. V. Rozengart, V. V. Zhebreshiy, Kh. M. Lifelits, production of SKS-65PG latex for paints; A. B. Peyaner, N. A. Fermor, L. P. Raspopova, V. G. Detrodeyeva, production of SKS-50I latex for insulation purposes in electric industry. Several reports were devoted to the development of formulations and application of latices, and the use of new equipment for production of sponge rubber (A. A. Korotkov, R. L. Berlin). They are: A. Ya. Drinberg (deceased), V. M. Kobetskaya, N. T. Ustinova, structural paints; I. Ya. Shtern, S. A. Kontorova, pigment dyes for textiles and waterproof wall paper; Yu. L. Margolina, M. B. Genel', M. I. Shepelev, B. Ye. Kutsenok, production of certain items by ionic deposition; L. I. Kostrikova, A. R. Narinskaya, A. P. Pisarenko, B. I. Belov, V. V. Kozlov, the use of latices in the artificial leather industry; I. T. Taranenko, Ye. S. Popova, the use of latices for production of

Card 3/5

All-Union Conference on Synthetic Latices

77284 \$07/63-4-6-18/-7

rubber-asbestos items; S. A. Kilter, the use of latices in the polygraphic industry; Ye. S. Roytman, the use of latices in the canning industry; N. T. Ustinova, the use of latices in the shoe industry; V. I. Yeliseyeda, the use of latices in the leather industry; L. P. Racp ; V. A. Popov, L. M. Neroslavskiy, B. M. Panov, N. I. Timasheva, the use of latines in the cable industry; Yu. S. Cherkinskiy, B. A. Arkhangel'skiy, T. N. Yar-yers (USSR Academy of Construction and Architecture), putlick for the use of latices for production of latex-lener. items. The following reports were devoted to the study of properties of synthetic latices: S. A. Selivanovskiy. N. A. Fermor, A. V. Lebeder, the area compled by emulsifier molecules in adsorption layer; S. M. Minto, A. V. Lebedev, N. A. Fermor, the degree of saturation of adsorption envelopes of the latex particles as indicator of the stability of latex; S. A. Serivanorskiy, N. A. Fermor, the size of particles in synthetic latices prepared by continuous and batch polymerization; D. M. Sandomirskiy, M. K. Vdovehetkova, reaction of

Card + 5

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240720010-4

All-Union Conference on Synthetic Latices

77284 SOVy63-4-6-15 37

synthetic latices with electrolytes; N. N. Znamenskiy, V. V. Chernaya, V. I. Novikov, the effect of ultrasound on properties of synthetic latices; A. M. Savinkova, S. S. Voyutskiy, V. V. Chernaya, V. I. Noviko, the effect of ultrasound on properties of synthetic latices; A. M. Savinkova, S. S. Voyutskiy, V. V. Chernaya, certain regularities in gelatification of synthetic latices; M. S. Monastyrskaya, A. S. Kuznetsov, S. A. Pavlov, increase of adhesion of polar latices to textile; D. M. Sandomirskiy, Hu Yu-mu, the mechanism of film formation of regular latices; S. S. Voyutskiy, D. M. Sandomirskiy, N. M. Fodiman, R. M. Panich, the mechanism of film formation of vulcanized synthetic latices.

Card 5/5

ACCESSION NR: AP4041457

\$/0138/64/000/006/0009/0013

AUTHOR: Khazanovich, I. G., Fermor, N. A., Peyzner, A. B., Lebedev, A. V., Yezriyelev, A. I.

TITLE: Latexes containing nitrile groups in the copolymer and their adhesive properties

SOURCE: Kauchuk i rezina, no. 6, 1964, 9-13

TOPIC TAGS: latex, synthetic rubber, tire cord, butadiene-nitrile, latex SKN-5, adhesive 'property, latex polymerization, acrylonitrile latex, latex structure

ABSTRACT: Since the Na-dibutylnaphthalenesulfonate which is commonly used as an emulsifying agent in butadiene-nitrile rubber has an adverse effect on the adhesive properties of latexes, and since the poor adhesive properties of the latexes SKN-40, SKN-26 and SKN-18 may be due to the extremely high content of polar groups, the authors investigated the adhesive properties (in the impregnation of tire cord) of butadiene-nitrile latexes prepared at 5, 30 or 50C with a butadiene: acrylic acid nitrile ratio varying from 60:40 to 97:3 and using the K scaps of synthetic fatty acids which are also used as emulsifying agents in the preparation of latex SKS-30 ShKhP. Studies showed that the polymerization rate

Card 1/3

ACCESSION NR: AP4041457

increases with the nitrile content. The best adhesive properties were obtained with 5-7 parts nitrile, especially at 5C; the latex SKN-5 prepared at 5C was therefore investigated further. Since lack of homogeneity in the latex may have a favorable effect on the adhesive properties, the following formula was developed for calculating the integral and differential composition of the copolymer and the degree of conversion of the monomers in relation to the overall degree of polymerization during the preparation of latex SKN-5:

$$\ln \frac{m_2}{(M_2)_0} = \frac{1}{0.48} \ln \frac{1 - 0.48y_0}{1 - 0.48y} \quad \mathcal{B}$$

$$\frac{M_2}{M_3} = \left(\frac{0.48y_0 - 1}{0.48y - 1}\right)^{2.60}$$
(1)

 $\frac{M_1}{(M_2)_0} = \left(\frac{0.48y_0 - 1}{0.48y - 1}\right)^{2.60}$ where $(M_2)_0$ is the number of mols of nitrile before polymerization, y_0 is the ratio of the molecular concentrations of butadiene and nitrile before polymerization, and M_2 and yrepresent the corresponding values at any other given degree of polymerization. Experiments showed that this structural heterogeneity can best be achieved by adding the nitrile in batches during polymerization, so that addition of the nitrile in 5 aliquots, for example, leads to better adhesive properties even though the content of bound nitrile in the copolymer is decreased. Orig. art. has: 4 formulas, 3 figures and 3 tables.

Čord	2/3
------	-----

CIA-RDP86-00513R0012407 **06/15/2000**

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240720010-4

P. D. Salle, P. D. Cheng, Ch. S. S. Salle, Market St. A. S. Salle, S. S. Salle, S. S. Salle, S. S. Salle, S. S.

Using synthetic latices as a base in preparing paints. Biultekh.-ekon.inform. no.5:20-23 '59. (MIRA 12:8) (Latex) (Paint)

KHAZANOVICH, I.G.; FERMOR, N.A.; PEYZNER, A.B.

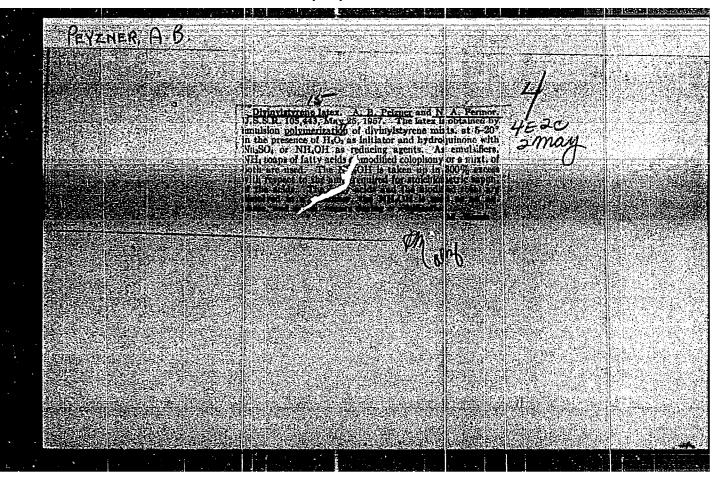
Latexes containing functional groups in the colymer and their adhesive properties. Kauch. i res. 22 no.5:17-20 My '63.

(MIRA 16:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka im. S.V.Lebedeva.

(Resins, Synthetic—Testing)

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240720010-4



L 14271-63 EMP(1)/EMT(m)/EDS AFFTC/ASD Ps-2 NM

ACCESSION NR: AP3001593

8/0138/63/000/005/0017/0020

AUTHORS: Khasmovich, I. G.; Fermor, N. A.; Permer, A. B.

TITIE: Latexes containing functional groups in the pelymer; their adhesive properties

SOURCE: Kauchuk i resina, no. 5, 1963, 17-20

TOPIC TASS: latex, functional group, adhesiveness, polar group.

ABSTRACT: The sim of the present/investigation consisted in finding a way to attemption the adhesion of rubber to the cord in automobile tires. The authors endeavored to synthesize a cord-coating copolymer containing the reactive hydroxyl and phenol groups. The constituents chosen were but diene and styrene polymers, to which were added the monomers of an alkylcardinol or of an alkylphenol, the polymerization being conducted in quantities up to 40 liters in the presence of synthetic fatty acid scaps and for an initiator, at 20 or 50C. Coating compounds for viscose and polymide cord were compounded from the obtained copolymers by the incorporation of 9.5% of a resorcinol-formal delyde resin. The strength of adhesion of the coated cord to natural and synthetic carcass rubbers was determined, the highest adhesion being exhibited by coatings containing 5% alkycarbinol or 5-7%

Cord 1/2

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240720010-4

	[[[사고 나는 사람이 그들을 다.			
L 14271-63				eta da la companya da
ACCESSION NR: AP 30019	193			2
alkylphenol, both bein	R shove the adherion			
Coomika. Stuce Dueuc	LE IDEE CONTABLET AN	made with		A9 49 A
ATOM OT CHAT WAS CUATE !	PU CORDELL TIN TA 25 I	navamat hwi a mada		
into the experimental mearly ten times super	CODDIVERSE GIFTE WE	icani paties wit	h	1. 12
charts, and 3 tables.		ourners exist	art. Masi Z	Tormitas, 3
ASSOCIATION: Vsesoyus	my y nanchno-issledov	ratel'skly inst	itut sintetic	heskogo
kauchuka im. S. V. Le Rubber)	penear (arrantion 26)	reuming heles	BU THEFT FASO	or synthetic
Rubber)			54 119 of 0140	or synthetic
wencunry Im. D. A. Te	DATE ACQ		34 113 6 70 80	ENCL: 00
Rubber)	DATE ACQI	08Ju163		ENCL: 00
Rubber) SUBMITTED: 00		08Ju163		
Rubber) SUBMITTED: 00	DATE ACQI	08Ju163		ENCL: 00
Rubber) SUBMITTED: 00	DATE ACQI	08Ju163		ENCL: 00
Rubber) SUBMITTED: 00	DATE ACQI	08Ju163		ENCL: 00
Rubber) SUBMITTED: 00	DATE ACQI	08Ju163		ENCL: 00
Rubber) SUBMITTED: CO SUB COOK: NA	DATE ACQI	08Ju163		ENCL: 00
Rubber) SUBMITTED: 00	DATE ACQI	08Ju163		ENCL: 00

Section 4 is a second series and services and services and services and services are services and services and services are services are services and services are services and services are services are services are services and services are services are services and services are services ar

5/727/61/000/000/004/009 1031/1242

AUTHOUS: Permon, M.A., Lebedev, A.V., Peyaner, A.S., Minta, S.M.

TITIE: Aging of chloroppene latex Mairit 9-4 (L-4)

SOURCE: Sinter latebook 1 1kh primeneniye. Ed. by A.V. Lebedev, A.B. Persner, and L.A. Fermor. Leningrad, Goukhimizdat,

1361, 144-166

TENT: Two methods have been employed for the investigation: determination of prejects at various stages of film-envelope production by the ion-precipitation method and determination of elongation of a gel obtained by ion-precipitation. Both, the natural life aging test and accelerated test were carried out. It was found that gel properties which have a bearing on the behaviour of a pl -4 (IA4) latex during ion-precipitation-production of film, depend on the extent of polymerization, the size of polymer particles, the pl of the latex, and the amount of emploifying agent. The technical properties of a latex deteriorated on aging. The aging causes the

Card 1/2

5/727/61/000/000/004/009 IO31/1242

Aging of chloroprene latex...

detachment of chlorine from the polymer, hence a decrease in pli, branching of the polymer chain, further polymerization of chloroprene, gradual congleteration of the globules, an increase in viscosity, a decrease in surface tension of the latex and a reduction in the content of the anti-aging agent. An increase in temperature hastens the aging process, the maximum effect being obtained between 20 and 70°C. Stability of latex and its aging behaviour depend on the concentration of initial latex, the extent of polymerization, presence of free chloroprene, peroxides, and ammonium, the temperature of polymerization, and the nature of the "anti-knocking" regulator. An experimental polymerization in dilute solution at a low pif and temperature, without emulgator, and with a smaller amount of peroxide catalyst, yielded the modified L-4 latex with better properties and high stability. There are 24 tables. The most important English-language reference is D.E. Anderson, P. Covacio, Ind. Eng. Chem. 47, 171 (1955).

ACCOUNT : FORTAL COCCA

Card 2/2

\$/727/61/000/000/002/009 1031/1242

Armunes: Poyzner, A.L., Lobedov, A.V., Fermor, H.A., Skvirskaya, 20.7., crobrova, A.L., Berlin, R.L., Taranenko, S.V.

TITLE: Synthesis of latex for form rubber manufacture

SOURCE: Sintez late took 1 I'th primeneniye. Ed. by A.V. Lebedev, A.B. Peyzner, and M.A. Permor, Leningrad, Goskhimizdat,

1961, 21-49

TEXT: The purpose of this work was the development of the manufacture of foam rubber from synthetic latexes produced in the USSR. The initial experiments were performed with Crc-304 (SKS-304) and chloroprene latexes subsequently, new experimental latexes were synthetized: chloroprene-butedrene and chloroprene-isoprene; butadrene-styrene latexes CKC-30A (SKS-30A), CKC-30 [SKS-30), CKC-30 (SKS-50) with Jekal and CKC-50 (SKS-50) with ammonium paraffinate. German Buna S-3 and Buna-SS-Special (butadrene-styrene 50:50) were also investigated. The results were unsatisfactory with the excep-

Card 1/3

S/727/61/000/000/002/009 1031/1242

Synthesis of latex for ...

tion of SKS-50 latex of modified mix, and the detailed study was narrowed to this meterial only. Factors like full saturation of particles film, increased pil of the solution, increased concentration of solids, and low foaming temperature, improve the foaming ability of a latex. Foam stability in the SKS-50 latex was achieved by an increase in suap content up to 10% of weight of solids. Optimum plasticity depends on the nature of polymer, on condition of polymerization, on mix composition and on technology of the process. A relation exists between the rate of polymerization and the solids content of the latex. The smaller the size of particles, the higher the rate of polymerization. On the other hand, the small-particle latex, due to its higher viscosity thickness at a lower solids content. The SES-50 latex was stabilized with potassium paraffinate which reduced the surface tension to 45-48 dynes/ cm. The possibility of substituting ∞ -methylstyrene for styrene in a butadiene-styrene polymer was studied. The polimerization

Card 2/3

\$/081/62/000/001/065/067 B119/B101

AUTHORS:

Fikhtensol'ts, V. 3., Babikov, O. I., Poyzner, A. B., Poddubnyy, 1. Ya., Solotareva, R. V.

TITLE:

Ultrasonic method for determining the conversion degree during polymerization in emulsion

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 1, 1962, 535, abstract 1P230 (Vestn. tekhn. i ekon. inform. N.-i. in-t tekhn.-ekon. issled. Gos. kom-ta Sov. Min. SSSR po khimii, no. 10, 1960,

TEXT: There is a linear relationship between the propagation velocity of ultrasonics and the content of dry residue (polymer) in chloroprene and butadiene styrene latexes containing no monomer. The polymer composition (butadiene/styrene ratio) affects the change of ultrasonic velocity with increasing concentration. The dependence of ultrasonic velocity on the conversion degree of latex is not linear: at first the velocity changes slowly, then it increases rapidly, and drops again toward the end of the process owing to the presence of monomer. A decrease of the monomer

CIA-RDP86-00513R001240720010-4" APPROVED FOR RELEASE: 06/15/2000

Card 2/2

LEBEDE , A.V., red.; PEYZNER, A.B., red.; FERMOR, N.A., red.; SHUR,
Ye.I., red.; FOMKINA, T.A., tekhn. red.

[Synthesis of latexes and their uses] Sintez lateksov i ikh primenenie. Pod red. A.V.Lebedeva, A.B.Peiznera, N.A.Fermora. Leningrad, Gos. nauchno-tekhn.izd-vo khim. lit-ry, 1961. 367 p.

(MIRA 15:2)

l. Leningrad. Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka. 2. Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka im. aksd. S.V. Lebedeva, Leningrad (for Lebedev, Fermor).

(Rubber, Synthetic)

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240720010-4

PEYZNER, A.B.; LEBEDEV, A.V.; FERMOR, N.A.; ROZENGARDT, Ye.V.; ZHEBROVSKIY, V.V.; LIVSHITS, Kh.M.; DRINBERG, A.Ya. [deceased]; KOBETSKAYA, V.M.; USITINCVA, O.N.

Synthesis of styrene-butadiene latexes and the production of paints derived from them. Lakokras.mat. i ikh prim. no.2:7-12

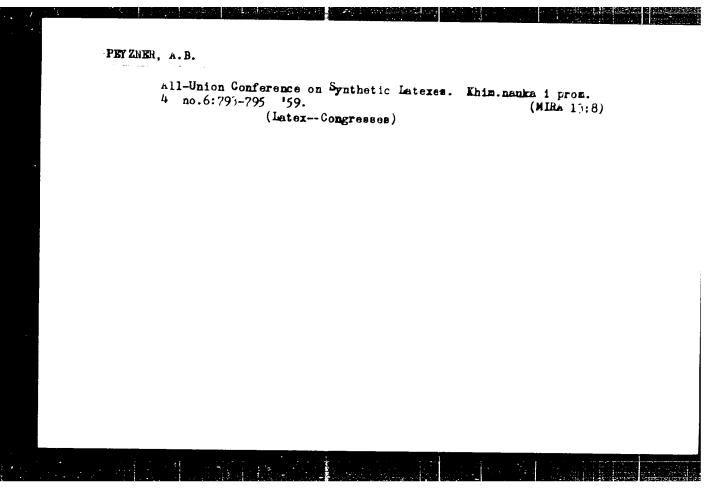
'61. (Paint) (Butadiene)

PEYZHER, A.B.; FERMOR, N.A.; KOROTKOVA, A.A.; SEVIRSKAYA, Ye.P.

Production of special synthetic latexes for the manufacture of foam rubber goods. Kauch i rez. 19 no. 1:1-9 Ap '60. (MIRA 13:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchnka imeni S.V.Lebedeva.

(Latex) (Foam rubber)



15.9200 2209 2109

83835 S/138/60/000/004/001/008 A051/A029

AUTHORS:

Peyzner, A.B., Fermor, N.A., Korotkova, A.A., Skvirskaya Ye **相同的是10**

TITLE:

The Production of Special Synthetic Latexes for the Manufac turing of Foam Rubber/Products

PERIODICAL:

Kauchuk i Rezina, 1960, No. 4, pp. 1 - 9

In order to organize mass production of Soviet foam rubber TEXT: articles, it was important to establish a raw material base, i.e., to in troduce the production of synthetic latex suitable for the manufacturing of foam rubber. The article deals with the results of the work concerning the synthesis of the special latex. The possibility of using butadiene styrene and chloroprene latexes was investigated which are produced in industry with a high content of dry residue (about 50%). The minimum permissible concentration is just about 50% when used for the purpose in question (Refs. 1 4) The following latexes were tested: (KC-30)(SKS-3011), the Nairites fi. 1 . 2 N-3, N-4, N-5, N-6 (L-1), (L-2), (L-3), (L-4), (L-5), (L-6). The four rab per articles were produced by the mechanical foaming method. As a result of

Card 1/4

83835

S/138/60/000/004/001/00B A051/A029

The Production of Special Synthetic Latexes for the Manufacturing of Foam Rubber Products

the tests the following latexes were developed: 1) Chloroprene butadiene and chloroprene-isoprene types, 2) SKS-30A (with 4 5 and 7 5% Nekal), 3) SKS-30 with Nekal, paraffinate of sodium, sodium soap, modified colophony and a mixture of fatty acid and colophony soaps as emulsifiers. 4) SKS-50 obtained with Nekal. 5) SKS 50, with ammonia paraffinate It appeared that the possibility of obtaining satisfactory foam rulber from synthetic latex depended on the nature of the polymer, as well as the nature of the emulsifier The most positive results were obtained in the case of the SKS-50 type latex using ammonia salts of synthetic fatty acids. Therefore the work was concentrated on the latter. It was found that the feaming in the latex, as well as its durability, improves with an increase in the pH of the latex to 10 and by lowering the foaming temperature. The authors also discuss the effect of the plasticity on the SKS-50 latex properties. There were 56 latex samples tested and it was found that a normal foam rubber was always obtained at a hardness of the polymer not over 1,700g In order to produce satisfactory foam rubber from SKS-50 latex, it is imperative that the latter contains a

Card 2/4

83635 \$/138/60/000/004/001/308 A051/A029

The Production of Special Synthetic Latexes for the Manufacturing of Foam Rubber Products

polymer with a relatively high plasticity. Some of the reasons for the influence of the plasticity on the quality of the foam rubber are discussed in Ref. 9 by Peyzner and co-workers Regarding the kinetics of polymerica. tion during synthesis, experiments showed that one reason for the ineffective expenditure of the initiator was the presence of iron compounds in the initial emulsion. A small amount of Trilon B was introduced into the initial emulsion in order to eliminate the harmful effect of the iron compounds. The content of the dry material had to be elevated, as being one of the conditions for using the latex in the production of foam rubber. The soap con tent was reduced in the initial emulsion in order to increase the size of the particles in the latex, which would secure the necessary concentration of dry material. The temperature of the polymerization was lowered and the conversion of mongmers was increased to over 60% The stability of the CKC 50 Tr(SKS-50 PG) latex was shown to be inadequate. An additional amount of ammonium paraffinate (up to 1.5% of the polymer weight) was added after completion of the polymerization to increase the stability of the polymer. In order to produce a test batch of SKS-50 latex, of increased size a tempera-Card 3/4

THE RESERVE OF THE PARTY OF THE

83835

S/138/60/000/004/001/008 A051/A029

The Production of Special Synthetic Latexes for the Manufacturing of Foam Rubber Products

ture of 50°C, and a monomer conversion of 75% were proposed. A latex mixture of the composition given on page 6 was tested in the laboratory and the entire latex was shipped to the Balanda and Kursk Plants. Other latexes were tested as raw material in the production of foam rubber such as butadiene—methyl styrene latex and butadiene—nitrile latex. The stability of CKM.467 (SKN-40P) latex is described and it is stated that this latex was sent to the Foam Rubber Article Plant in Balanda for use in production. The development of the SKN-10 latex synthesis is still under way. There are 8 tables, 4 figures, 17 references: 6 Soviet and 11 English.

ASSOCIATION: Vsesoyuznyy Nauchno-issledovatel skiy institut sinteticheskogo kauchuka im S V Lebedeva (All-Union Scientific Research.
Institute of Sythetic Rubber imen: S V Lebedev)

Card 4/4

s/+38/59/000/012/003/006

AUTHORS:

Peyzner, A. B., Uzina, R. V., Fermor, N. A., Khazanovich, I. G.

TITLE:

The Basic Factors Determining the Type of Divinyl-Styrene

Latex in Tire Cord Impregnation

PERIODICAL: Kauchuk i Rezina, 1959, No. 12, pp., 10-14

TEXT: The effect of the emulsifier, the polymerization depth, the polymerization temperature, the plasticity of the polymer, the ratio of divinyl and styrene in the polymerizing mixture on the strength of the tond of the rubber-cord system in the polymerization of divinyl-styrene latexes was studied. 1) The emulsifier: It was found that by replacing Nekal with soaps of paraffinic acids and hydrated colophony the strength of the bond system is increased significantly. This is explained by an increase in the physico-mechanical properties of the adhesive film and by the intensity of the intermolecular interaction at the adhesive-rubber interface (Ref. 7) (Table 2). In switching over to low-temperature polymerization latexes the stated advantages are retained. 2) The polymerization depth: The bond strength of the impregnated cord decreases in the case of divinyl-styrene latexes of low-temperature polymerization at a conversion depth of 60%.

Card 1/4

s/+38/59/000/0+2/003/006

The Basic Factors Determining the Type of Divinyl-Styrene Latex in Thre Cord Impregnation

3) The polymerization temperature: It was found that the highest bond stability was obtained at a temperature of 20°C (Fig. 3). This is explained by the combination of good elastic properties of the polymer at low-temperature polymerization and a certain branching of the chains observed in a switch-over from 5 to 20°C. At 20°C the polymerization takes place more rapidly, the 60% conversion depth is reached after 9 hours instead of 24 hours (Fig. 4). 4) The polymer plasticity: With an increase in the polymer plasticity the bond stability of the system and the physico-mechan: cal properties of the adhesive film pass through their optimum value at a plasticity of 0.15-0.25 according to Karrer (1,500-2,800 g hardness according to Defoe) (Fig. 6). This is explained by the fact that the high plasticity of the polymer ensures favorable conditions for molecule diffusion from the adhesive into the rubber lining, but does not ensure the necessary mechanical properties of the adhesive (Refs. 4, 9). A decrease in the plasticity of the polymer raises the mechanical properties of the adhesive and thus limits the mobility of moleculars and lowers their diffusibility which leads to a decrease in the bond strength. A polymer with an average plasticity (0.15-0.25 according to Karrer) ensures the best adhesion.

Card 2/4

s/138/59/000/012/503/966

The Basic Factors Determining the Type of Divinyl-Styrene Latex in Tire Cort Impregnation

5) The styrene ring content: The presence of styrene in the divinyl-styrene latex (over 30 weight parts) does not increase the strength of the adhesive. rubber system. Fig. 7 shows that an increase in the styrene content in the polymerizing hydrocarbon mixture increases the physico-mechanical properties of the film adhesive; the stability of the bond between the impregnated cord and the rubbers reaches its optimum value at 30 weight parts of styrene At a styrene content of more than 30 weight parts the adhesive hardness in creases. This brings about unfavorable conditions for the diffusion of the adhesive polymer rings and for the polymer compatibility. 8) Selection of the divinyl-styrene latex type for the impregnation of the tire cord. As a result of the investigations conducted a specific latex is recommended for this purpose. The CKC-30WXTL (SKS-30ShKhP) divinyl-styrene latex was ab tained according to given specifications and was found to surpass the CKC-30MM (SKS-30Sh) latex both in the bond strength between the impregnated cord and the rubbers and by the physico-mechanical properties of the adhesive film (Table 3). The authors point out that by using the recommended latex the strength of the bond between the individual parts of the tire the durability of the tires in stationary tests and the roadability of the

Card 3/4

\$/138/59/000/012/003,006

The Basic Factors Determining the Type of the Divinyl-Styrene Later in Tire Cord Impregnation

tire during performance is improved. There are 3 tables, 8 graphs, 10 references: 7 Soviet and 3 English.

ASSOCIATION: Vsesoyuznyy Nauchno-issledovatel skiy Institut sinteticheskogo kauchuka im. S.V. Lebedevai Nauchno-issledovatel skiy
institut shinnoy promyshlennosti (The All-Union Scientific
Research Institute of Synthetic Rubber im. Lebedev and
Scientific Research Institute of the Tire Industry)

Card 4/4

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240720010-4

PEYZNER, A.B.; FERMOR, N.A.

Making foam-rubber articles of synthetic latex. Biul.tekh.
(MIRA 13:1)

ekon.inform. no.8:15-17 '59.

(Rubber goods)

KHAZANOVICH, I.G.; FERMOR, N.A.; PEYZNER, A.B.; LEHEDEV, A.V.; YEZRIYELEV, A.I.

Synthetic latexes containing nitrile groups in the copolymer, and their adhesive properties. Kauch. i rez. 23 no.6:9-13

[MIRA 17:9]

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka im. S.V. Lebedeva.

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240720010-4

